



chain nodes :

11 12 14

ring nodes :

1 2 3 4 5 6 7 8 9

ring/chain nodes :

13

chain bonds :

3-11 6-14 11-12 11-13

ring bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 7-8 8-9

exact/norm bonds :

1-2 1-6 2-3 3-4 4-5 4-7 5-6 5-9 6-14 7-8 8-9 11-12 11-13

exact bonds :

3-11

G1:O,N

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:CLASS 12:CLASS 13:CLASS 14:CLASS

## EAST Search History

| Ref # | Hits | Search Query                          | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|---------------------------------------|---|------------------|---------|------------------|
| L1    | 524  | (544/281).CCLS.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 15:48 |
| L2    | 150  | (514/259.1).CCLS.                     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 15:54 |
| L3    | 1    | Daisuke.inv. and Machii.inv. and 1    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:00 |
| L4    | 1    | Koji.inv. and Suzuki.inv. and 1       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:01 |
| L5    | 1    | Tsutomu.inv. and Matsumura.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:02 |
| L6    | 1    | Hitoshi.inv. and Arai.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:02 |
| L7    | 1    | Miho.inv. and Iwase.inv. and 1        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:03 |
| L8    | 1    | Hiroshi.inv. and Yano.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:03 |
| L9    | 1    | Satoshi.inv. and Nakanishi.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:04 |
| L10   | 1    | Fumiko.inv. and Ogino.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:04 |
| L11   | 1    | Kotaro.inv. and takasaki.inv. and 1   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:05 |

## EAST Search History

|     |   |                                    |   |    |     |                  |
|-----|---|------------------------------------|---|----|-----|------------------|
| L12 | 1 | Hideaki.inv. and Kusaka.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2007/04/29 16:05 |
|-----|---|------------------------------------|---|----|-----|------------------|

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| Ref # | Hits | Search Query                          | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|------|---------------------------------------|---|------------------|---------|------------------|
| L1    | 524  | (544/281).CCLS.                       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 15:48 |
| L2    | 150  | (514/259.1).CCLS.                     | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 15:54 |
| L3    | 1    | Daisuke.inv. and Machii.inv. and 1    | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:00 |
| L4    | 1    | Koji.inv. and Suzuki.inv. and 1       | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:01 |
| L5    | 1    | Tsutomu.inv. and Matsumura.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:02 |
| L6    | 1    | Hitoshi.inv. and Arai.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:02 |
| L7    | 1    | Miho.inv. and Iwase.inv. and 1        | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:03 |
| L8    | 1    | Hiroshi.inv. and Yano.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:03 |
| L9    | 1    | Satoshi.inv. and Nakanishi.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:04 |
| L10   | 1    | Fumiko.inv. and Ogino.inv. and 1      | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:04 |
| L11   | 1    | Kotaro.inv. and takasaki.inv. and 1   | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2007/04/29 16:05 |

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|     |   |                                    |   |    |     |                  |
|-----|---|------------------------------------|---|----|-----|------------------|
| L12 | 1 | Hideaki.inv. and Kusaka.inv. and 1 | US-PGPUB;<br>USPAT;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2007/04/29 16:05 |
|-----|---|------------------------------------|---|----|-----|------------------|